CLAIMS

WHAT IS CLAIMED IS:

1.   A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each of a plurality of mobile assets;

processing the data to develop historical information regarding actual usage of each mobile asset, said actual usage being arranged in a plurality of operational modes of the asset, each of said operational modes being indicative of a respective state of health of said asset; and

distributing the information via a global information network.

2.   The method of claim 1 wherein said historical information regarding actual usage of the asset is enhanced with environmental data collected during the actual usage of the asset, said environmental data comprising at least one environmental parameter contributing to the level of wear of said asset.

3.   The method of claim 1 further comprising determining a service recommendation for each respective mobile asset based on the actual usage of said respective mobile asset.

4.   The method of claim 3 further comprising communicating said service recommendation to an operator of the mobile asset.

5.   The method of claim 4 wherein said service recommendation includes suggesting a service center able to perform said service recommendation.

6.   The method of claim 5 wherein the suggested service center is based on the position of the mobile asset relative to said service center.

7.   The method of claim 6 wherein the suggested service center is further based on whether said service center is part of a chain of preferred service centers.

8.   The method of claim 1, wherein the step of distributing information further comprises:

linking a data center to the global information network;

linking a service center for the mobile assets to the global information network; and

posting a recommendation for a service activity for one of the plurality of mobile assets on a web site accessible via the global information network.

9.   The method of claim 1, further comprising:

collecting data regarding cargo being transported by the respective mobile assets;

using the data regarding cargo to develop information regarding the cargo; and

distributing the information regarding cargo via the global information network.

10.   The method of claim 1 further comprising:

collecting data regarding respective service functions provided through a respective one of the remote assets;

using the data regarding the respective service functions to develop information regarding said functions; and

distributing the information regarding said service functions via the global information network.

11.   The method of claim 10, further comprising:

developing a web site including a respective web page including information regarding the service functions performed for each one of a respective plurality of customers; and

providing access to the respective web pages via the global information network to the respective plurality of customers.

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12. A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each of a plurality of mobile assets;

analyzing the data to identify a respective trend in at least one operating

5   parameter of a respective one of the plurality of mobile assets;

developing a service recommendation and service schedule in response to the identified trend and data from servicing requirements of other mobile assets of the plurality of mobile assets; and

communicating the service recommendation to an operator of said mobile

10   asset.

13. The method of claim 12 wherein said data analyzing step is performed on-board the mobile asset.

15   14. The method of claim 13 wherein said data analyzing step is performed at a data center generally remote relative to said mobile asset.

15. A computerized method for managing a plurality of mobile assets, the method comprising:

20   collecting data regarding each of a plurality of mobile assets;

processing the data to develop historical information regarding actual usage of each mobile asset; and

posting to said operator, based on said collected data, reminder information to ensure compliance of any applicable regulatory requirements.

16.   A computerized method for managing a plurality of mobile assets, the method comprising:

collecting operator data regarding the operation of each one of a plurality of mobile assets by a respective operator;

5   processing the data to develop historical information regarding the operation of the mobile asset by the respective operator; and

posting to said operator, based on said collected data, reminder information to ensure compliance of any applicable regulatory requirements

10   17.   The method of claim 16 further comprising analyzing said collected data to verify satisfactory compliance by the respective operator of said regulatory requirements.

18.   The method of claim 19 further comprising posting to said operator
15   economic incentive information to encourage said operator to have the mobile asset serviced by a service center that is part of a chain of preferred service centers.

19.   The method of claim 18 further comprising issuing commands to the mobile asset, based on said collected data, to avoid non-compliance of said regulatory
20   requirements

20.   A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each of a plurality of mobile assets;
25   processing the data to develop historical information regarding actual usage of each mobile asset, said actual usage being arranged in a plurality of operational modes of the asset, each of said operational modes being indicative of a respective state of health of said asset;

using the data to develop a failure prediction for at least one of the plurality of
30   remote assets; and

distributing the information via a global information network.

21.   A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each mobile asset of a plurality of mobile assets that together constitute a mobile asset system;

5   using the data to develop historical information regarding actual usage of each said mobile asset, wherein said historical information is classified based on a plurality of operational modes of the asset, each of said operational modes being indicative of a respective state of health of said asset;

using the data to generate operational settings for each asset so as to increase 10   the performance and operating life of the mobile asset system; and

distributing the operational settings via a global information network.

22.   A system for managing a fleet of mobile assets, the system comprising:

a data gathering element configured to collect data regarding each of a 15   plurality of mobile assets;

a processor configured to process the collected data to develop historical information regarding actual usage of each mobile asset, said actual usage being arranged in a plurality of operational modes of the asset, each of said operational modes being indicative of a respective level of wear of said asset; and

20   a data link in communication with a global information network for distributing information related to the plurality of mobile assets.

23.   A system for managing vehicles, the system comprising:

a plurality of sensors carried on a vehicle for generating data indicative of the 25   operation of the vehicle;

a memory device carried on the vehicle for receiving said operational data and recording data indicative of the operation of the vehicle for its useful life; and

a transmitter for transmitting data in the memory device to a global information network for communication to interested parties.

24.   A system for managing vehicles, the system comprising:

a plurality of sensors carried on a vehicle for generating data indicative of the operation of the vehicle;

a transmitter for transmitting data from the vehicle to a data center;

5   a receiver at the data center for receiving data transmitted from the vehicle;

memory at the data center for recording data indicative of the operation of the vehicle over the useful life of the vehicle; and

a data link at the data center for transferring data indicative of the operation of the vehicle to a global information network for communication to interested parties.

10   25.   A system for managing a vehicle within a fleet of vehicles, the system comprising:

a plurality of sensors carried on a vehicle for generating data indicative of the operation of the vehicle;

a memory device for gathering and recording operational data for the life of

15 said vehicle;

a data link in communication with the memory and with a global information network for transferring information relating to the operation of said vehicle to the network; and

a data processor accessing a data base of historical information data relating to

20 the operation of other vehicles in the fleet corresponding to said vehicle and evaluating the operational data from said vehicle in light of said historical information from said other vehicles in the fleet.

26. A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each of a plurality of mobile assets;

processing the data to develop historical information regarding actual usage of each mobile asset, said actual usage being arranged in a plurality of operational modes of the asset, each of said operational modes being indicative of a respective state of health of said asset;

establishing a cost/benefit evaluation of the mobile asset for a proposed future plan of use in light of the state of health of the mobile asset ; and

distributing the information via a global information network.

27. The method of claim 26 further comprising determining a service recommendation for each respective mobile asset based on the actual usage of said respective mobile asset.

28. The method of claim 26 wherein said economic value of each respective mobile asset is further based on whether any service recommendations for the asset have been complied with.

29. The method of claim 27 further comprising predicting faults likely to occur based on whether any service recommendations for the asset have been disregarded.

30.   A computerized method for managing a plurality of mobile assets, the method comprising:

collecting data regarding each of a plurality of mobile assets having warranties covering the operation of the mobile assets;

processing the data to develop historical information regarding actual usage of each mobile asset, said actual usage being arranged in a plurality of operational modes of the asset;

determining the remaining warranty coverage of each respective mobile asset based on the actual usage of the asset; and

distributing the information via a global information network.

31.   The method of claim 30 wherein said warranty coverage determining step comprises adjusting said coverage based on whether any service recommendations for the asset have been complied with.